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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,496	02/17/2004	Joel K. Grossman	13768.495	3351
47973 7590 08/17/2007 WORKMAN NYDEGGER/MICROSOFT 1000 EAGLE GATE TOWER 60 EAST SOUTH TEMPLE SALT LAKE CITY, UT 84111			EXAMINER STEVENS, ROBERT	
			ART UNIT 2162	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/780,496

Applicant(s)

GROSSMAN ET AL.

Examiner

Robert Stevens

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. §. 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 June 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>20070615</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Office withdraws the previous rejections of the claims under 35 USC §§101 and 103(a), in light of the amendment. However, the Office sets forth new rejections of the claims under 35 USC §103(a), in light of the amendment.

Response to Arguments

2. Applicant's arguments filed 6/7/2007 have been fully considered but they are not persuasive.

Regarding the previous rejections of the claims under 35 USC §101, these rejections have been withdrawn in light of the amendment.

Regarding the previous rejections of the claims (especially independent claim 1) under 35 USC §103(a), Applicant argues on page 21 that the cited references do not teach a single and centralized data store for contact data according to a schema not natively accessible to an application. Applicant further argues that Balaji would be inoperable because it requires multiple data stores to function

The Office respectfully disagrees. The Office notes that the first argument is directed to the claim amendments. These amendments have been addressed by newly cited art. Second, the FAC database shown in Fig. 1 #28 as being under the control of server #20, is suggestive of a single centralized repository.

Applicant further asserts that the independent claims have substantially similar limitations as those argued concerning independent claim 1, and therefore should be allowable under the same rationale. Applicant asserts that such rationale also applies for the dependent claims.

The Office respectfully disagrees. See the counterarguments set forth above concerning independent claim 1.

For at least these reasons, the Office asserts the rejections of the claims as set forth below.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/7/2007 has been entered.

Claim Objections

4. **Claims 1 and 28 are objected to** because of the following informalities: Regarding claim 1, it appears that the line 15 recitation of “request” should be “that requests”. Regarding claim 28, it appears that the line 14 recitation of “an request” should be “a request”, and it appears that there is a grammatical error in the recitation of lines 34-35 stating “of the in the schematized format”. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1, 3-19 and 21-30 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Balaji et al. (US Patent Application Publication No. 2005/0015439, filed Jul. 15, 2003 and published Jan. 20, 2005, hereafter referred to as “Balaji”) in view of Chris Hibbert (“Visual Flex and XML”, downloaded from www.dataaccess.com/whitepapers/xml/XMLWP.htm, dated by Wayback Machine as: May 2, 2001, pp. 1-25, hereafter referred to as “Hibbert”) and further in view of Draper et al. (US Patent No. 6,581,062, filed Mar. 2, 2000 and issued Jun. 17, 2003, hereafter referred to as “Draper”) and Haeberle et al. (US Patent Application Publication No.

2005/0080805, provisionally filed Jan. 22, 2003 and published Apr. 14, 2005, hereafter referred to as "Haeberle").

Regarding independent claim 1: Balaji discloses *In a computing system that has access to contact data stored according to a schema in a data store, the data store being in communication with applications configured to request access to schematized contact data in the data store, one or more of the applications lacking the configuration to natively access the schematized contact data, (See Balaji Abstract, discussing the providing for data integration and exchange among a plurality of applications.) a method for simplifying access to the schematized contact data, (See Balaji Abstract, noting its flexible architecture.) the method comprising: an application receiving a request to access contact data stored in a data store, (See Balaji paragraph [0029], discussing the ability to send data from a client application using a first format.) the application calling an external contact data control request the contact data in a non-schematized format accessible to the application; (See Balaji Figure 2 #150 schema generator and #156 DTD generator.)*

However, Balaji does not explicitly teach the use of contact data or the remaining limitations as claimed. Hibbert, though, discloses the use of contact data. (See Hibbert page 19 section entitled "DTDs", showing contact data abstracted as a DTD, in the context of page 20 section entitles "Schemas", which states that schemas and DTDs perform the same function, and provides and exemplary schema fragment of contact data.) Additionally, Hibbert teaches *and the application causing a display device to display the contact data to a user of the application,*

the displayed contact data corresponding to the contact data received by the application in a non-schematized format and converted by the external contact data control from the schematized format, and the contact data being displayed notwithstanding that the application lacks the configuration to natively access the contact data stored in the dat store according to the schema. (See Hibbert page 21 section entitled “Style Sheets: CSS and XSL”, discussing the display of contact data using style sheets to format display elements.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hibbert for the benefit of Balaji, because to do so allowed a programmer to ensure that an XML file conformed to an intended definition (i.e., was valid), as taught by Hibbert on page 14 in the entitled “DTDs and Schemas”. These references were all applicable to the same field of endeavor, i.e., XML-based system development.

Furthermore, Balaji does not explicitly teach the remaining limitations as claimed. Draper, though, discloses *the application receiving the requested contact data from the external contact data control in the non-schematized format, the contact data received by the application having been converted from a corresponding schematized format by the external data contact control*; (See Draper Fig. 1, teaching the mapping of semi-structured and structured data.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Draper for the benefit of Balaji in view of Hibbert, because to do so allowed a user to reversibly create either semi-structured or structured data. These references were all applicable to the same field of endeavor, i.e., XML-based system development.

Additionally, Balaji does not explicitly teach the use of contact data or the remaining limitations as claimed. Haeberle, though, teaches *wherein the data store is centralized and acting as a single data store for contact data for a plurality of applications accessing contact data, and wherein the centralized data store stores all contact data for the plurality of applications according to a single schema for which the application receiving the request lacks the configuration to natively access*; (See Haeberle Fig. 1 #18 in the context of paragraph [0074], teaching the choice of storage configurations employing one or more databases.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Haeberle for the benefit of Balaji in view of Hibbert and Draper, because to do so allowed a programmer to enable users to access data that is generated by a variety of applications, as taught by Haeberle in paragraph [0021]. These references were all applicable to the same field of endeavor, i.e., XML-based system development.

Regarding claim 3: Balaji teaches requests to convert via a schema-based system.. (See Balaji Figure 2, especially #150, #12a and #12b, in the context of the Abstract, discussing the ability to exchange data among a plurality of applications. It is further noted that a process can forward data to any other process, regardless of authorization, because authorization harkens to the accessing of the process, not the mere sending of data to that process.)

However, Balaji does not explicitly teach the use of contact data. Hibbert, though, discloses the use of contact data. (See Hibbert page 19 section entitled “DTDs”, showing contact data abstracted as a DTD, in the context of page 20 section entitled “Schemas”, which states that schemas and DTDs perform the same function, and provides and exemplary schema fragment of contact data.)

Regarding claims 4-11: Balaji teaches requests to interact with a processing module. (See Balaji Abstract, discussing an architecture to facilitate data integration and exchange. It is further noted that the recited limitations present a list of well-known features that are outside of the application’s inventive crux of data transformation via a schema-based system.)

However, Balaji does not explicitly teach the use of contact data. Hibbert, though, discloses the use of contact data. (See Hibbert page 19 section entitled “DTDs”, showing contact data abstracted as a DTD, in the context of page 20 section entitled “Schemas”, which states that schemas and DTDs perform the same function, and provides and exemplary schema fragment of contact data.)

Regarding claims 12-13: Balaji does not explicitly teach the use of contact data and presentation templates. Hibbert, though, discloses the use of contact data. (See Hibbert page 19 section entitled “DTDs”, showing contact data abstracted as a DTD, in the context of page 20 section entitled “Schemas”, which states that schemas and DTDs perform the same function, and provides and exemplary schema fragment of contact data.) Hibbert further discloses the well-

known use of CSS and XSL. (See Hibbert page 21 sections entitled “StyleSheets: CSS and XSL” and “XSL”, discussing commonly known formatting templates.)

Regarding claim 14: Balaji does not explicitly teach the use of contact data or setting a default value. Hibbert, though, discloses the use of contact data. (See Hibbert page 19 section entitled “DTDs”, showing contact data abstracted as a DTD, in the context of page 20 section entitled “Schemas”, which states that schemas and DTDs perform the same function, and provides an exemplary schema fragment of contact data. Also see Hibbert page 20 section entitled in bold as “The qualifiers change as well”, which shows the assignment of default values for the variable set minOccurs=0 and maxOccurs=*.)

Regarding independent claim 15: Balaji discloses *In a computing system that has access to contact data that is stored in a centralized data store according to a single schematized format for multiple applications in the data store being in communication with applications configured to request access to schematized contact data, one or more of the applications lacking the configuration to natively access schematized contact data in the data store*, (See Balaji Abstract, discussing the providing for data integration and exchange among a plurality of applications.) *a method for simplifying access to the schematized contact data*, (See Balaji Abstract, noting its flexible architecture.) *the method comprising: receiving contact data for one or more contacts, the contact data being received by an application that lacks the configuration to natively access contact data of a schematized format*, (See Balaji paragraph

[0029], discussing the ability to receive data in a second format, in the context of paragraph [0033], discussing the integration of new data.) *the application calling the external contact data control, wherein calling the external contact data control includes the application sending the updates to the contact data to the external contact data control in a non-schematized format;* (See Balaji Figure 2 #150 schema generator and #156 DTD generator.) *the external contact data control updating the schematized contact data based on the updated non-schematized contact data such that the other applications can access the updated schematized contact data and notwithstanding that the application lacks the configuration to natively access schematized contact data.* (See Balaji paragraph [0029], discussing the ability to receive data in a second format, in the context of paragraph [0033], discussing the integration of new data.)

However, Balaji does not explicitly teach the use of contact data or the remaining limitations as claimed. Hibbert, though, discloses the use of contact data. (See Hibbert page 19 section entitled “DTDs”, showing contact data abstracted as a DTD, in the context of page 20 section entitled “Schemas”, which states that schemas and DTDs perform the same function, and provides an exemplary schema fragment of contact data.) Additionally, Hibbert teaches *the application causing a display device to display to a user of the application at least a portion of the contact data for one or more contacts;* (See Hibbert page 21 section entitled “Style Sheets: CSS and XSL”, discussing the display of contact data using style sheets to format display elements.) Additionally, Hibbert teaches *receiving, at the application, updates to the contact data for the one or more contacts;* (See Hibbert page 7 section entitled “Using XML in Visual DataFlex”, discussing the changing of node contents and structure in the 8th paragraph

(“Remembering that XML is easily written to ... “.) *and displaying the updated contact data to a user of the respective application.* (See Hibbert page 21 section entitled “Style Sheets: CSS and XSL”, discussing the display of contact data using style sheets to format display elements.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hibbert for the benefit of Balaji, because to do so allowed a programmer to ensure that an XML file conformed to an intended definition (i.e., was valid), as taught by Hibbert on page 14 in the entitled “DTDs and Schemas”. These references were all applicable to the same field of endeavor, i.e., XML-based system development.

Further, Balaji does not explicitly teach the remaining limitations as claimed. Draper, though, discloses *using the application or the one or more other applications* (See Draper Fig. 1, teaching the mapping of semi-structured and structured data.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Draper for the benefit of Balaji in view of Hibbert, because to do so allowed a user to reversibly create either semi-structured or structured data. These references were all applicable to the same field of endeavor, i.e., XML-based system development.

Additionally, Balaji does not explicitly teach the use of contact data or the remaining limitations as claimed. Haeberle, though, teaches *wherein the data store is centralized and acting as a single data store for contact data for a plurality of applications accessing contact data, and wherein the centralized data store stores all contact data for the plurality of applications according to a single schema for which the application receiving the request lacks*

the configuration to natively access; (See Haeberle Fig. 1 #18 in the context of paragraph [0074], teaching the choice of storage configurations employing one or more databases.)

accessing the updated contact data from the centralized data store (See Haeberle Fig. 1 #18 in the context of paragraph [0074], teaching the choice of storage configurations employing one or more databases.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Haeberle for the benefit of Balaji in view of Hibbert and Draper, because to do so allowed a programmer to enable users to access data that is generated by a variety of applications, as taught by Haeberle in paragraph [0021]. These references were all applicable to the same field of endeavor, i.e., XML-based system development.

Regarding claims 16-17: Balaji teaches requests to convert via a schema-based system.. (See Balaji Figure 2, especially #150, #12a and #12b, in the context of the Abstract, discussing the ability to exchange data among a plurality of applications. It is further noted that a process can forward data to any other process, regardless of authorization, because authorization harkens to the accessing of the process, not the mere sending of data to that process.)

However, Balaji does not explicitly teach the use of contact data. Hibbert, though, discloses the use of contact data. (See Hibbert page 19 section entitled “DTDs”, showing contact data abstracted as a DTD, in the context of page 20 section entitles “Schemas”, which states that schemas and DTDs perform the same function, and provides and exemplary schema fragment of contact data.)

Regarding claim 18: Balaji does not explicitly teach the use of contact data and validation. Hibbert, though, discloses the use of contact data. (See Hibbert page 19 section entitled “DTDs”, showing contact data abstracted as a DTD, in the context of page 20 section entitled “Schemas”, which states that schemas and DTDs perform the same function, and provides an exemplary schema fragment of contact data.) Hibbert further discloses document validation. (See Hibbert page 16 section entitled “DTDs and Schemas”, discussing document validation, it having been an obvious variant as to whether a document is validated and the format that the document is in [when the validation process was performed].)

Regarding claim 19: Balaji teaches translating non-schematized data into schematized data. (See Balaji Abstract in the context of Figure 2, teaching the ability to exchange data among a plurality of applications. Also see Balaji paragraph [0029], discussing data transformation among application data formats.)

However, Balaji does not explicitly teach the use of contact data. Hibbert, though, discloses the use of contact data. (See Hibbert page 19 section entitled “DTDs”, showing contact data abstracted as a DTD, in the context of page 20 section entitled “Schemas”, which states that schemas and DTDs perform the same function, and provides an exemplary schema fragment of contact data.)

Regarding independent claim 21: Balaji discloses *A computing system, comprising: one or more processors*; (See Balaji Figure 2, showing client applications #12a and #12b, it having been implied that these applications would have run on at least one processor.) *and one or more computer-readable storage media, having stored thereon one or more of the plurality of applications that are not configured to natively access the schematized contact data, and at least one external contact data control that can be executed by the one or more processors, the at least one external contact data control being configured to: receive a request from an application that lacks the configuration to natively access the contact data stored at the centralized data store in the schematized format*; (See Balaji paragraph [0031], discussing the reception of a query by the calling application, and paragraph [0029], discussing the ability to receive data in a first format.) *retrieve schematized contact data in response to the request*; (See Balaji Figure 2, showing application interface path to the schematized data, and paragraph [0029], discussing the ability to send data from a client application using a first format.) *convert retrieved contact data from the schematized format to a corresponding non-schematized format such that the application can present contact data to a user notwithstanding that the application lacks the configuration to access contact data directly in the schematized format*; (See Balaji paragraph [0029], discussing the ability to receive data in a second format.)

However, Balaji does not explicitly teach the use of contact data or the remaining limitations as claimed. Hibbert, though, discloses the use of contact data. (See Hibbert page 19 section entitled “DTDs”, showing contact data abstracted as a DTD, in the context of page 20 section entitled “Schemas”, which states that schemas and DTDs perform the same function, and

provides and exemplary schema fragment of contact data.) Additionally, Hibbert teaches *and send the contact data in the non-schematized format to the application to be presented to a user*. (See Hibbert page 21 section entitled “Style Sheets: CSS and XSL”, discussing the display of contact data using style sheets to format display elements.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hibbert for the benefit of Balaji, because to do so allowed a programmer to ensure that an XML file conformed to an intended definition (i.e., was valid), as taught by Hibbert on page 14 in the entitled “DTDs and Schemas”. These references were all applicable to the same field of endeavor, i.e., XML-based system development.

However, Balaji does not explicitly teach the remaining limitations as claimed. Draper, though, discloses *retrieve contact data from the centralized data store and in the schematized format in response to the request* (See Draper Fig. 1, teaching the mapping of semi-structured and structured data.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Draper for the benefit of Balaji in view of Hibbert, because to do so allowed a user to reversibly create either semi-structured or structured data. These references were all applicable to the same field of endeavor, i.e., XML-based system development.

Additionally, Balaji does not explicitly teach the use of contact data or the remaining limitations as claimed. Haeberle, though, teaches *a centralized data store acting as a single data store of contact data for a plurality of applications which access the contact data, wherein*

the centralized data store stores all contact for the plurality of applications and according to a single schema not natively accessible by one or more of the plurality of applications, (See Haeberle Fig. 1 #18 in the context of paragraph [0074], teaching the choice of storage configurations employing one or more databases.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Haeberle for the benefit of Balaji in view of Hibbert and Draper, because to do so allowed a programmer to enable users to access data that is generated by a variety of applications, as taught by Haeberle in paragraph [0021]. These references were all applicable to the same field of endeavor, i.e., XML-based system development.

Regarding claims 22-23: Balaji does not explicitly teach the use of contact data and presentation templates. Hibbert, though, discloses the use of contact data. (See Hibbert page 19 section entitled “DTDs”, showing contact data abstracted as a DTD, in the context of page 20 section entitled “Schemas”, which states that schemas and DTDs perform the same function, and provides and exemplary schema fragment of contact data.) Hibbert further discloses the well-known use of CSS and XSL. (See Hibbert page 21 sections entitled “StyleSheets: CSS and XSL” and “XSL”, discussing commonly known formatting templates, it having been an obvious variant as to the specific display presented.)

Claims 24-27 are substantially similar to claims 5, 7, 8 and 14, respectively, and therefore likewise rejected

Regarding independent claim 28: Balaji discloses *A computing system, comprising: one or more processors;* (See Balaji Figure 2, showing client applications #12a and #12b, it having been implied that these applications would have run on at least one processor.) *and one or more computer-readable storage media, having stored thereon: one or more of the plurality of applications lacking the configuration to natively access the schematized contact data, and at least one external contact data control that can be executed by the one or more processors, the at least one external contact data being configured to: receive a request from an application to access schematized contact data for the one or more contacts, the contact data being stored in the centralized data store in a schematized format, and the application making the request notwithstanding the application lacking the configuration to natively access contact data in the schematized format;* (See Balaji paragraph [0029], discussing the ability to receive data in a second format.) *retrieve contact data from the centralized data store corresponding to the request from the application, the retrieved contact data being in the schematized format;* (See Balaji paragraph [0029], discussing the ability to receive data in a second format.) *send the non-schematized contact data to the application;* (See Balaji paragraph [0029], discussing the ability to receive data in a second format.) *receive updated contact data in a non-schematized format from the application;* (See Balaji paragraph [0029], discussing the ability to receive data in a second format.) *convert the updated contact data from*

a non-schematized format to a corresponding schematized format that conforms with the contact data schema of the centralized data source, thereby allowing the application to update contact data[of the in the schematized format] notwithstanding that the application lacks the configuration to natively access the contact data stored in the schematized format; (See Balaji paragraph [0029], discussing data format conversion.) and store corresponding contact data in the centralized data store and in the schematized format such that other applications can access the stored contact data in accordance with the contact data schema. (See Balaji Figure 1 #22, showing a schema registry accessible to many client applications [each labeled as “#12”].)

However, Balaji does not explicitly teach the use of contact data or the remaining limitations as claimed. Hibbert, though, discloses the use of contact data. (See Hibbert page 19 section entitled “DTDs”, showing contact data abstracted as a DTD, in the context of page 20 section entitled “Schemas”, which states that schemas and DTDs perform the same function, and provides and exemplary schema fragment of contact data.) Additionally, Hibbert teaches *and send the non-schematized contact data to the application to be presented to a user.* (See Hibbert page 21 section entitled “Style Sheets: CSS and XSL”, discussing the display of contact data using style sheets to format display elements.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hibbert for the benefit of Balaji, because to do so allowed a programmer to ensure that an XML file conformed to an intended definition (i.e., was valid), as taught by Hibbert on page 14 in the entitled “DTDs and Schemas”. These references were all applicable to the same field of endeavor, i.e., XML-based system development.

However, Balaji does not explicitly teach the remaining limitations as claimed. Draper, though, discloses *convert the contact data in the schematized format to a corresponding non-schematized format*; (See Draper Fig. 1, teaching the mapping of semi-structured and structured data.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Draper for the benefit of Balaji in view of Hibbert, because to do so allowed a user to reversibly create either semi-structured or structured data. These references were all applicable to the same field of endeavor, i.e., XML-based system development.

Additionally, Balaji does not explicitly teach the use of contact data or the remaining limitations as claimed. Haeberle, though, teaches *a centralized data store acting as a single data store of contact data for a plurality of applications which access the contact data, wherein the centralized data store stores all contact for the plurality of applications and according to a single schema not natively accessible by one or more of the plurality of applications*, (See Haeberle Fig. 1 #18 in the context of paragraph [0074], teaching the choice of storage configurations employing one or more databases.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Haeberle for the benefit of Balaji in view of Hibbert and Draper, because to do so allowed a programmer to enable users to access data that is generated by a variety of applications, as taught by Haeberle in paragraph [0021]. These references were all applicable to the same field of endeavor, i.e., XML-based system development.

Regarding claim 29: Balaji teaches parsing of data. (See Balaji paragraph [0029].)

However, Balaji does not explicitly teach the use of contact data. Hibbert, though, discloses the use of contact data. (See Hibbert page 19 section entitled “DTDs”, showing contact data abstracted as a DTD, in the context of page 20 section entitled “Schemas”, which states that schemas and DTDs perform the same function, and provides an exemplary schema fragment of contact data.).

Claim 30 is substantially similar to claim 18, and therefore likewise rejected.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Non-Patent Literature

Kim, Sung Wan, et al., "Developing a Native Storage Structure for XML Repository System in Main Memory", 5th International Conference on High Speed Networks and Multimedia Communications, © 2002, pp. 96-100.

Shui, William M., et al., "Application of XML Schema and Active Rules System in Management and Integration of Heterogeneous Biological Data", BIBE '03, Mar. 10-12, 2003, pp. 367-374.

Banerjee, Sandeepan, et al., "Oracle8i – The XML *Enabled* Data Management System", 16th International Conference on Data Engineering, San Diego, CA, Feb. 29 - Mar. 3, 2000, pp. 561-568.

Haas, L. M., et al., "Transforming Heterogeneous Data with Database Middleware: Beyond Integration", Bulletin of the IEEE Computer Society Technical Committee on Data Engineering, © 1997, pp. 1-6.

Nambiar, Ullas, et al., "Current Approaches to XML Management", IEEE Internet Computing, Vol. 6, Issue 4, Jul/Aug 2002, pp. 43-51.

Lear, Anne C., et al., "XML Seen as Integral to Application Integration", IT Professional, Vol. 1, Issue 5, Sep/Oct 1999, pp. 12-16.

US Patent Application Publications

Knight et al


2004/0083453

Contact Information

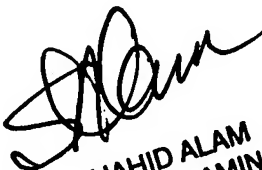
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Stevens whose telephone number is (571) 272-4102. The examiner can normally be reached on M-F 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Robert Stevens
Examiner
Art Unit 2162

August 3, 2007


SHAHID ALAM
PRIMARY EXAMINER